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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/003,574	10/24/2001	Hannu Kuoksa	33047/240187	5083

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EXAMINER
HENDRICKSON, STUART L

ART UNIT	PAPER NUMBER
1754	9

DATE MAILED: 09/27/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

mk-9

Office Action Summary	Application No. 10/003514	Applicant(s) Nanu
	Examiner Nesbitt Jan	Group Art Unit 1759

—Th MAILING DATE of this communication appears on the cover sheet beneath th correspondence address—

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

☒ Responsive to communication(s) filed on 9/24/02.

☐ This action is **FINAL.**

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle,* 1935 C.D. 1 1; 453 O.G. 213.

Disposition of Claims

☒ Claim(s) 1-25 is/are pending in the application.

Of the above claim(s) 11-25 is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 1-16 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☒ Claim(s) 1-25 are subject to restriction or election requirement

Application Papers

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Pri rity under 35 U.S.C. § 119 (a)–(d)

☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119 (a)–(d).

☒ All ☐ Some* ☐ None of the:

☒ Certified copies of the priority documents have been received.

☐ Certified copies of the priority documents have been received in Application No. _____.

☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a))

*Certified copies not received: _____.

Attachment(s)

☒ Information Disclosure Statem nt(s), PTO–1449, Paper No(s). 6

☐ Int rview Summary, PTO–413

☒ Notice of Reference(s) Cited, PTO–892

☐ Notice of Informal Patent Application, PTO–152

☐ Notice of Draftsperson's Patent Drawing R view, PTO–948

☐ Oth r. _____

Office Action Summary

Applicant's election of Group I in Paper No. 8 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

A) In claim 1, 'applying a model' is unclear as to the actual steps performed. It appears only to recite a mental step.

B) It is unclear exactly what the process is; the chemical reactions should be set forth as to the exact product made.

C) In claim 4, 'type' is unclear as to what other systems are encompassed. Further, the claims should not refer to the figures unless absolutely necessary. See also claim 10.

D) In claims 3 and 5, 'corrected' is unclear. Is the model wrong? If the correct values are known why was the model permitted to be made faulty? In claim 5, 'a difference' is not clear- between what and what? Claim 5 is very vague.

E) In claim 7, 'dynamic' is unclear. How does it evolve or change?

F) Claim 8 is unclear why the target should change. The claim seems to say that if the temperature is too high, then change the temperature you want so that it also is too high.

G) The claims as a whole are unclear as to how the 'model' (computer control program?) works and how the values are calculated.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-16 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

There is no disclosure of how to calculate the 'coefficient' (claim 11)., how to decide when the model is wrong, when to obey the model (claim 8), how to 'use' the model, whether a computer is being claimed or even the nexus between density and alkali. It appears in claim 1 that 'calculating', rather than 'controlling' is meant. How does the mere mental steps or computer calculation affect the density of a material in a beaker? Moreover, Musow column 4 lines 50-65 indicate that titratable alkali is mathematically related to, not controlling of or controlled by, density. Therefore, the premise of the model is faulty. Why not simply control the density by controlling the density? Claim 16 appears to be a necessary part of claim 1, and should be incorporated therein. If these are not measured, how does one exert control, know what to alter or verify that the process is going as it should?

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baines taken with Mosow.

Baines teaches ~~in columns 5 and 9~~ on pgs. 7 and 13 computer control of a causticization process. The computer can monitor any parameter characteristic of the system and send via a feedbck loop controls to other inputs to achieve a stable reaction system. The only differences seen between this and the claims is what variables are monitored. Musow teaches in column s2 and 4 that each system can have a different variable measured, like titratable alkali or density.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to monitor the density or alkali in the process of Baines because doing so asserts control over the process for monitoring for optimum results. Note that in general, processes can be optimized (In re Boesch 205 USPQ 215) and that automating a process is an obvious expedient (In re Venner et al. 120 USPQ 192). The workings of how the computer makes calculations. (claims 8, 12, 14) is deemed conventional as to how computer control programs work- see Baines column 9. Choosing coefficients which accurately model reality is an obvious expedient, to assure efficiency. The submitted references are of interest

Any inquiry concerning this communication should be directed to examiner Hendrickson at telephone number (703) 308-2539.

Stuart Hendrickson
examiner Art Unit 1754